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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,269	02/13/2002	Hiroki Konaka	401571	6817

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EXAMINER

NELSON, ALECIA DIANE

ART UNIT PAPER NUMBER

2675

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/073,269

Applicant(s)

KONAKA ET AL.

Examiner

Alecia D. Nelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on 10/04/05. These drawings are approved by the examiner.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. **Claims 1-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over SmartDraw in view of Apfelbaum et al. (U.S. Patent No. 6,853,963).

With reference to **claim 1**, SmartDraw discloses a user interface designing apparatus, comprising state set editing means for adding/deleting states of a composite display part having a plurality of states, wherein the composite display part is displayed to a user as part of a user interface designed by the user interface designing apparatus in the teachings of the usage of state representations of the basic statechart diagram symbols and notations (see page 16) and the ability to use the interface designing apparatus to generate software design, which is known to include graphical user interface as well as web design and interface (see page 3, left column); event handling editing means for describing event handling for state transition in each of the states of said composite display part in the teachings of the usage of transition lines that represent the path between different states of an object (see page 17); elementary display part storing means for storing elementary display parts designed previously in the teachings of the usage of a library available to the user in a software design folder (see page 22); and state display editing means for adding/deleting elementary display parts to be displayed in each of the states of the composite display part in the teachings of the usage of the user having the ability to add symbols from the library to the composite display part (see page 22-43).

While SmartDraw teaches the usage of the states and transitions there fails to be teachings of a plurality of states.

Apfelbaum et al. teaches a method of using a computer to generate and analyze an extended finite state machine model of a system wherein the state model includes a plurality of states (see Figures 2-6).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow the usage of a plurality of states in a state model as taught by Apfelbaum et al. in a system which suggest the usage of a plurality of states as taught by SmartDraw for providing a user interface design system that allows for the necessary amount of states and transitions to be generated by the user for providing the user with a desirable interface for interacting with the system.

With reference to **claim 2**, SmartDraw teaches that the library stores the composite display parts or that the state display editing means is arranged to add/delete designed composite display parts stored in the composite display storing means, in teaching the usage of a library which stores frequently/common used symbols, wherein it is further taught that the user is capable of editing what is retrieved from the library (see 22-43).

With reference to **claims 3 and 4**, SmartDraw teaches that the state display editing means and the event handling editing means are arranged to edit en bloc the display parts and event handlings which are displayed in teaching that the editing occurs to items displayed in the drawing area or page (see page 22).

SmartDraw fails to specifically teach that the state set editing means groups several states of the composite display part.

Apfelbaum et al. teaches, as explained above, a plurality of states being grouped for performing an interface for the user.

Therefore it would have been obvious to allow the states to be grouped for the reasons as explained above with reference to **claim 1**.

With reference to **claims 5-7**, SmartDraw teaches that the elementary display part stored in the elementary display part storing means having properties corresponding to size, position, external appearance and behavior (see pages 22-43), further comprising: property editing means for editing the properties of the elementary display part added to each state or the state group of the composite display part in teaching that the user is allowed to use what is already in the library or convert that which is in the library to generate something new (see page 28). With further reference to claim 6, there is taught a composite display part property setting means adding/deleting the properties representative of behaviors of the composite display part and wherein the property editing means is arranged as to edit the properties of the composite display part added to each state of the composite display part (see page 25). With further reference to claim 7, it is further taught that the property editing means is arranged as to be capable of describing the properties of the elementary or composite display parts by referencing values of the properties of other elementary display parts or composite display parts (see page 31).

With reference to **claims 8 and 9**, while teaching all that is required as explained above SmartDraw further teaches that the state display editing means is arranged as to display graphically disposition of the elementary or composite display parts in each

state or state group of the composite display part while editing graphically properties and information concerning layout such as size or dimension, or inter-part relation through direct manipulation with an input device or by activating directly a corresponding one of the property editing means (see pages 32-44).

With reference to **claims 10-12**, SmartDraw teaches all that is required as explained above, however fails to teach a simulation means for simulating behavior of the composite display part stored in the composite display part storing means in conformance with manipulation input activated through an input device, a virtual display part storing means for storing virtual display parts having functions realized virtually by the simulation means, or that the event handling editing means sets, virtually, an event difficult to realize, practically, and edits an event handling for the event, and the simulation means issues the event, virtually, through an input/output device to simulate the processing for the virtual event issued, with a relevant composite display part.

Apfelbaum et al. teaches a simulation means (see process Fig 9) for simulating behavior of the composite display part stored in the composite display part storing means in conformance with manipulation input activated through an input device (see column 6, lines 40-63); a virtual display part storing means (table 224) for storing virtual display parts having functions easy to realize virtually by the simulation means (see column 6, lines 47-57); wherein the event handling editing means is arranged as to set virtually an event difficult to realize practically and edit an event handling for the event and the simulation means is arranged as to make the virtual event to be issued through

the medium of an input/output device to thereby simulate the processing for the issued virtual event with a relevant composite display part (see column 6, line 64-column 7, line 29).

Therefore it would have been obvious to one having ordinary skill in the art to allow the usage of the visual representation of the display parts and it's functions to be provided to the user in the simulation of operation as explained above to be combined with the teachings of SmartDraw in order to provide an a programming product which allows for analyzing a state machine model of a system.

Response to Arguments

5. Applicant's arguments filed 10/04/05 have been fully considered but they are not persuasive. While the applicant argues that the references fail to teach a state set editing means for adding/deleting states of a composite display part having a plurality of display states; wherein the composite display part is displayed to a user as a part of a user interface, the examiner believes that the combination of the references teaches the newly recited limitation as explained above. Granted SmartDraw teaches an object – oriented programming language, the programming language is used to create different types of structures including software design. Even if we examined the teachings of SmartDraw as a flowchart diagram, the flowchart will be presented to the user on a display device, and the user is allowed to further make changes to the flowchart by adding/deleting objects from the diagram. This thereby also teaches a state set editing

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means and a display part displaying to a user as a part of a user interface. Therefore it would have been obvious to one having ordinary skill in the art to for the software design to be a graphical user interface as described wherein there is provided a state set editing means for adding/deleting states of a composite display part having a plurality of states.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is 571-272-7771. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

adn/ADN
December 21, 2005


SUMATI LEFKOWITZ
SUPERVISORY PATENT EXAMINER